United States of America

Before the

Federal Energy Regulatory Commission

Remedying Undue Discrimination through Open Access Transportation Service and Standard Electricity Market Design **Docket No. RM01-12-000**

Pennsylvania Office of Consumer Advocate's

Long-Term Adequacy Proposal

For November 19, 2002 Technical Conference

A. LONG TERM ADEQUACY PRINCIPLES

Our analysis convinces us that the Commission's long term adequacy proposal is inconsistent with the commercial needs of any region, such as PJM, in which there is retail choice. We are also concerned, however, that other proposals that have been put forward within the northeast region, while solving several structural problems, will result in unnecessary costs to consumers. A proper model must recognize that generators do not rely solely upon capacity markets to recover their capital costs, even for peaking capacity, particularly where the energy price is based on a market clearing price bid approach. Such a market clearing price structure ensures that all units operating receive the highest bid accepted in any given hour, even though such bid may substantially exceed an individual generator's marginal operating cost. We emphasize that the level at which capacity payments are set must account for these energy revenues. Otherwise, most generators will be overcompensated.

It is our belief that non-peaking capacity, e.g., combined-cycle generation steam plants, etc. will continue to be built primarily in response to expectations regarding future energy prices, not capacity prices. Peaking capacity, on the other hand, will rely more heavily on the capacity market for its revenues. The auction periods in our capacity model, consequently, have been defined generally around the construction/implementation timetables faced by peaking generation, demand-side resources and other smaller scale capacity installations.

Our proposal is intended to address several critical issues. First, it ensures that long-term resource adequacy needs are satisfied. Second, it provides resource adequacy at a reasonable cost that recognizes all sources of revenue received by the generator. Third, it provides the ITP a last-resort, backstop responsibility for acquiring resources in the case of market failure. Fourth, it provides flexibility for the entry of new competitive suppliers and new competitive generators.

B. CAPACITY MARKET DESIGN PRINCIPLES

Our proposal contains five components:

1. **An administratively determined capacity requirement** - The RTO would establish a regional capacity requirement based on an agreed upon methodology such as the 1 day in 10 years loss of load probability. The RTO then informs each LSE of its expected allocation of the regional capacity obligation. Current LSE load obligations, as opposed to projected future requirements, are used as a baseline.

2. **An RTO capacity auction** – The RTO would hold an auction every six months to secure supply (capacity contracts) for a six month capacity commitment period eighteen months forward (see discussion below). Holding an auction every six months is intended to

allow for fairly easy entrance of capacity resources into the market and to facilitate the regular dissemination of information regarding the regional capacity position. The eighteen month lead time between the auction and the settlement period is intended to coincide with some reasonable estimate of the amount of time the RTO would require to build peaking capacity on an emergency basis per its backstop role. A capacity contract would obligate the seller to bid all available output into the day-ahead energy market and would grant the RTO the right to recall any real-time off-system sales. All capacity installed in the region and not contractually committed to provide capacity to an external region would be required to bid into the auction. LSE capacity contracts covering the settlement period, in place on the day of the auction, would be accounted for during the settlement process. Demand resources that meet the appropriate requirements may also bid into the auction. Generation, demand resources or transmission projects, which have not yet been brought on-line, may also participate. These planned resources must be required to enter into agreements with the RTO that commits them, subject to some RTO discretion, to meet specific milestones or pay to replace resources not delivered. Likewise, penalties on an existing committed capacity resource which fails to meet its obligations to the region must be in place.

We note the 18 month time frame, because it is conceptually tied to the amount of time it would take to get a peaking unit into service on an emergency basis, the time frame should be empirically determined and could vary over time. Ultimately, the time frame would depend, for example, on institutional readiness and could be longer or shorter depending upon whether sites have been secured, permits are in hand, fuel supply is assured, ability to secure financing is certain, and so on. In other words, the requisite

lead time might vary over the years and could conceivably be shortened with more experience and better preparation.

3. **Market-based pricing subject to bid limitation** - In order to protect consumers from potential seller market power, all offers should be subject to RTO-imposed bid limits or bid caps. The bid limits should reflect an assessment of the carrying cost of new peaking capacity minus expected energy and ancillary service revenues. This reflects our conclusion that revenues in energy markets which clear at the highest price bid accepted in a given hour will be well above actual marginal operating costs for many generators.

4. **A daily balancing mechanism** - The auction design and settlement rules must not operate as barriers to entry for new load serving entities, retail suppliers, particularly those that, at the outset, may have only limited information as to how many customers they will serve, or what their future loads may be. In addition, since customers may change suppliers relatively often in a dynamic marketplace, there will be corresponding change in LSE resource requirements. The rules must be flexible in their application and must facilitate the efficient and reasonable-cost transfer of resources as LSE load commitments change.

   We propose a capacity balancing mechanism that would allow an LSE that found itself short during the settlement period to meets its obligation. The RTO would assign to it payment obligation equal to the LSE's short position times the balancing price. If an LSE lost load to a competitor, one of two things could happen. If it were purchasing capacity from the RTO market to cover its obligation, it would simply pay less (the reduction in its obligation times the balancing price). If the LSE were covering its

obligation with a contract or owned generation, it would now be long on capacity and would be paid the balancing price for its surplus. The balancing mechanism eliminates the price risk associated with losing or gaining load. LSEs that lose load will not have to scramble to sell excess capacity into a relatively illiquid market at an unknown price and LSEs that gain load will know exactly what the capacity balancing price is before they acquire the load. Moreover, because sufficient capacity to meet the region's capacity obligation for the settlement period already would have been secured, there is no risk that an LSE would not be able to acquire capacity or that freed up capacity would be sold out of the market, potentially jeopardizing regional adequacy.

5. **A backstop mechanism** - In the event of market failure, that is, if the RTO determines that without intervention needed capacity will not be added to the region, the RTO, or Special Purpose Entity (SPE), created for this purpose) would hold a competitive solicitation for the construction of the least cost resource to meet the need. Upon completion, the RTO (or SPE) would auction the resource. In the likely event that the auction would not be fully compensatory, the additional costs would be recovered through a reliability charge levied against all load in the region. In this way, the seller of the auctioned resource would be made whole. The buyer of the resource would operate it subject to any RTO rules (including bid mitigation) that might apply to it and other resources.

C. CONCLUSIONS

Our proposal recognizes that the acquisition of capacity is best fulfilled through a combination of RTO-administered auctions and bilateral contractual arrangements between Load Serving Entities and capacity sellers. A mandatory semi-annual auction with a ceiling price is intended to mitigate supplier market power that is inherent given the concentration of supply and the inelastic demand. This proposal seeks to resolve the liquidity, price risk, and access problems now faced by Load Serving Entities gaining or losing load on a daily basis. We propose that an RTO administered capacity auction that combines an administratively determined capacity requirement, market-based pricing subject to bid limitation, a daily balancing mechanism, and a backstop mechanism will ensure long term adequacy.

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